

ADDENDUM NO. THREE
THORNTON FIRE STATION NO. 7
PROJECT NO. 21-281
CITY OF THORNTON, CO

TO: Prospective Bidders and all others concerned

DATE: November 04, 2021

PURPOSE: To provide additional information and clarification to the solicitation documents for the above-referenced Project.

1. Due to construction schedule concerns brought to Thornton's attention by the Prequalified Bidders, the required Project duration of 274 days is hereby increased to 364 days from NTP.
 - A. Delete the Bid Proposal form in its entirety and replace with the attached (under separate cover) Bid Proposal Form which has been modified to show the new schedule duration.
 - B. Delete the Contract for Construction and replace with the attached (under separate cover) Contract for Construction which has been modified to show the new schedule duration.
2. The following questions and answers are provided for additional clarification to the Contract Documents.

Question 1: "The cantilever gate is called out as both 25' and 26' in different places and the opening shown in 24' on sheet 6 of 24, please clarify what size the gate opening is intended to be."

Answer 1: The opening between fence posts = 25'. The distance between face of curb to face of curb = 24'.

Question 2: "The fence detail shows Ameristar Montage Plus for the fencing, which is ornamental steel but the specifications call for aluminum fence, which is correct?"

Answer 2: The fence is steel. The Cantilever gate is aluminum. The following specifications shall be included in the fence specification for Montague Plus fencing material as it relates to steel and not aluminum.

2.01 MANUFACTURER

The fence system shall conform to Montage Plus standard picket space **Welded and Rackable** (ATF - All Terrain Flexibility) Ornamental Steel, standard picket spacing, Genesis design, extended picket bottom rail treatment, 3-Rail style manufactured by Ameristar Fence Products, Inc., in Tulsa, Oklahoma.

2.02 MATERIAL

A. Steel material for fence panels and posts shall conform to the requirements of ASTM A653/A653M, with a minimum yield strength of 45,000 psi (310 MPa) and a minimum zinc (hot-dip galvanized) coating weight of 0.60 oz/ft² (184 g/m²), Coating Designation G-60.

B. Material for pickets shall be 3/4" square x 18 Ga. tubing. The rails shall be steel channel, 1.5" x 1.4375" x 14 Ga. Picket holes in the rail shall be spaced 4.675" o.c. for standard picket space. Fence posts and gate posts shall meet the minimum size requirements of Table 1.

2.03 FABRICATION

A. Pickets, rails and posts shall be pre-cut to specified lengths. Rails shall be pre-punched to accept pickets.

B. Pickets shall be inserted into the pre-punched holes in the rails and shall be aligned to standard spacing using a specially calibrated alignment fixture. The aligned pickets and rails shall be joined at each picket-to-rail intersection by Ameristar's proprietary fusion welding process, thus completing the rigid panel assembly (Note: The process produces a virtually seamless, spatter-free good-neighbor appearance, equally attractive from either side of the panel).

C. The manufactured panels and posts shall be subjected to an inline electrode position coating (E-Coat) process consisting of a multi-stage pretreatment/wash, followed by a duplex application of an epoxy primer and an acrylic topcoat. The minimum cumulative coating thickness of epoxy and acrylic shall be 2 mils (0.058 mm). The color shall be Black. The coated panels and posts shall be capable of meeting the performance requirements for each quality characteristic shown in Table 2 (Note: The requirements in Table 2 meet or exceed the coating performance criteria of ASTM F2408).

D. The manufactured fence system shall be capable of meeting the vertical load, horizontal load, and infill performance requirements for Commercial weight fences under ASTM F2408.

E. Gates with an out to out leaf dimension less than and including 72 inches shall be fabricated using Montage Plus ornamental panel material and 1-3/4" sq. x 14ga. gate ends. Gate leafs greater than 72 inches shall be fabricated using ForeRunner rails, 17 gauge pickets, intermediate uprights, gussets and 1-3/4" sq. x 14ga. gate ends. All rail and upright intersections shall be joined by welding. All picket and rail intersections shall also be joined by welding.

Table 1 - Minimum Sizes for Montage Plus Posts		
<u>Fence Posts</u>	<u>Panel Height</u>	
2-1/2" x 16 Ga.	Up to & Including 6' Height	
<u>Gate Leaf</u>	<u>Gate Height</u>	
	<u>Up to & Including 4'</u>	<u>Over 4' Up to & Including 6'</u>
Up to 4'	2-1/2" x 14 Ga.	3" x 12 Ga.
4'1" to 6'	3" x 12 Ga.	3" x 12 Ga.
6'1" to 8'	3" x 12 Ga.	4" x 12 Ga.

Table 2 - Coating Performance Requirements		
<u>Quality Characteristics</u>	<u>ASTM Test Method</u>	<u>Performance Requirements</u>
Adhesion	D3359 - Method B	Adhesion (Retention of Coating) over 90% of test

		area (Tape and knife test).
Corrosion Resistance	B117, D714 & D1654	Corrosion Resistance over 1,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance	D822 D2244, D523 (60° Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

Table 3 - Montage Plus - Post Spacing By Bracket Type						
Span	For CLASSIC, GENESIS, MAJESTIC, & WARRIOR 8' Nominal (91.95" Rail)					
Post Size	2-1/2"	2-1/2"	2-1/2"	3"	2-1/2"	3"
Bracket Type	Montage Plus Universal (BB112)	Montage Plus Line Blvd. (BB114)	Montage Plus Flat Mount (BB111)		Montage Plus Swivel (BB113)*	
Post Settings ± 1/4" O.C.	95"	95"	95"	95-1/2"	*95"	*95-1/2"
*Note: When using BB113 swivel brackets on either or both ends of a panel installation, care must be taken to ensure the spacing between post and adjoining pickets meets applicable codes. This will require trimming one or both ends of the panel.						

Question 3: "Specification 32 31 19 calls for 6' fence, however, the fencing details are showing 8', please clarify which is correct."

Answer 3: All gates and fences are 6'.

Question 4: "Spec Section 10 75 00: Please advise if winch or cleat system is required for the flag poles. Haylard is specified as white but poles are black - please confirm color of rope. Specs call for flags to be provided - please advise which size and confirm if US, CO and Thornton flags are desired."

Answer 4: A cleat system is preferred. Black rope is preferred. (3) 3'x5' Flags (Colorado, US and Thornton) will be provided by Thornton.

Question 5: "There is a gas line running under slab going to the range. I believe this will need to be in a vented pipe sleeve per code."

Answer 5: The below slab 1-1/2" TracPipe PSII BFG gas pipe serving the range will require a 2-1/2" conduit sleeve that originates and terminates in an accessible portion of the building and shall not be sealed. The conduit shall extend not less than 2 inches beyond the point where the pipe emerges from the floor per Section 404.14.2 of the 2018 IFGC.

Question 6: "The gas pipe is not sized, only given the size at the meter, which is 2". We can make an educated guess on the branch sizes and main reduction but would prefer the engineer design the system."

Answer 6: Please see attached sheets (under separate cover) P1.3 and P1.4 for gas piping riser / flatometric diagram for sizing.

Question 7: "Same situation like above on domestic water sizing, only parts have been sized. It appears that there are two drawings missing from the plumbing set that are shown on the architectural cover drawing P1.3 & P1.4."

Answer 7: Please see attached sheets P1.3 and P1.4 hot and cold water riser / flatometric diagrams for sizing.

Question 8: "Is the Contractor responsible for running structured cabling in the building?"

Answer 8: Yes. 6A within 1 1/2" conduit.

3. This Addendum becomes part of the Contract Documents. All other conditions and requirements of the Contract Documents will remain unchanged. Receipt of this Addendum must be acknowledged in the space provided on the Bid Proposal Form in the Project Manual.

END OF ADDENDUM NO. THREE

<i>Sean Saddler</i>	11/4/21
Sean Saddler, PE	Date
Contracts and Purchasing Director	